

REMARKS

Applicant respectfully requests entry of the foregoing and reconsideration of the subject matter identified in caption, pursuant to and consistent with 37 C.F.R. §1.116, and in light of the remarks which follow.

Claims 1, 3-27, 29-30, 32-55 and 57-58 are pending in the application.

Entry of this response is proper under 37 C.F.R. §1.116 because the response places the application into condition for allowance (for the reasons discussed herein) or places the application into better form for appeal, should an appeal be necessary. The response does not present any additional claims without canceling a corresponding number of finally rejected claims, does not raise the issue of new matter, and does not raise any new issues requiring additional search and/or consideration since the response is directed to subject matter previously considered during prosecution. The remarks presented supplement those in Applicant's Amendment of August 14, 2006, and are presented here in further response to the issues raised in the final rejection. Applicant respectfully requests entry of the response.

Applicant thanks the Examiner for acknowledging and considering Applicant's remarks and amendments in the reply submitted on August 14, 2006. In view of the following remarks, Applicant respectfully submits that the application is in condition for allowance.

Claims 12 and 41 continue to be rejected under 35 U.S.C. §112, second paragraph, as being indefinite. For at least the reasons that follow, withdrawal of the rejection is in order.

In particular, Applicant submits that claims 12 and 41 particularly point out and distinctly claim the subject matter which Applicant regards as exemplary of his invention. That is, because the scope of subject matter embraced by the claims is clear, and Applicant has not otherwise indicated that he intends the claim to be of different scope, the claims particularly point out and distinctly claim the subject matter which Applicant regards as exemplary of the claims subject matter. See *In re Borkowski*, 422 F.2d 904, 164 U.S.P.Q. 642 (C.C.P.A. 1970).

The Federal Circuit has had the opportunity to decide a number of §112, second paragraph, cases. From these cases, it is clear that definiteness of claim language must be analyzed, not in a vacuum, but in light of (1) the content of the particular application disclosure, (2) the teachings of the prior art, and (3) the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the claimed subject matter was made. See, for example, *In re Marosi*, 701 F.2d 799, 218 U.S.P.Q. 289 (Fed. Cir. 1983). The purpose of claims is not to explain the technology or how it works, but to state the legal boundaries of the patent grant. A claim is not "indefinite" simply because it is hard to understand when viewed without benefit of the specification. See *S3 Inc. v. nVidia Corp.*, 259 F.3d 1364, 59 U.S.P.Q. 2d 1745 (Fed. Cir. 2001).

Applicant submits that the meaning of the word "bisbenzoazolyls" is clear when read in light of the content of the application's disclosure, teachings of the prior art and when interpreted by those possessing the ordinary level of skill in the art. See, for example, the specification at paragraph 23, page 5, which states, "bis-benzoazolyl derivatives as described in EP-669,323 and U.S. Patent No. 2,463,264." One of ordinary skill in the art having read the disclosure at paragraph 23, page 5,

would readily understand what the legal boundaries of claims 12 and 41 are. That is, one of ordinary skill in the art, having read the disclosure at paragraph 23, page 5, would understand that the term "bisbenzoazolyls," as used in the pending claims, includes the bis-benzoazolyl derivatives described in EP-669,323 and U.S. Patent No. 2,463,264.

Accordingly, Applicant submits that because one skilled in the art would be able to tell with a reasonable degree of certainty whether his or her conduct is within or outside the scope of these claims, these claims are neither vague nor indefinite. See *In re Borkowski*.

For at least the reasons stated above, Applicant respectfully requests reconsideration and withdrawal of the §112, second paragraph, rejection.

Claims 1, 3-6, 9-18, 25, 29-30, 32-46, 53 and 58 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Iijima (U.S. Patent No. 6,258,857) in view of Fankhauser (US 2002/0155073); claims 1, 3-12, 14-25, 29-30, 32-41, and 47-52 stand rejected under §103(a) as being unpatentable over Iijima in view of Torgerson (U.S. Patent No. 6,458,906); and claims 26-27, 54-55, and 57 stand rejected under §103(a) as being unpatentable over Iijima in view of Torgerson and further in view of Candau (U.S. Patent No. 6,033,648). For at least the reasons that follow, withdrawal of the rejection is in order.

Independent claim 1 defines a device comprising (A) a reservoir confining at least one composition intended for protecting the skin and/or hair against UV radiation, and (B) means to place said composition under pressure, wherein said composition is in the form of simple or complex emulsion and comprises, in a cosmetically acceptable aqueous carrier: (a) a photoprotective system capable of

screening out UV radiation; and (b) spherical microparticles of porous silica.

(Emphasis added.)

Independent claim 30 defines a composition suited for pressurization and intended for protecting the skin and/or hair against UV radiation, wherein said composition is in the form of a simple or complex emulsion and comprises, in a cosmetically acceptable aqueous carrier: (a) a photoprotective system capable of screening out UV radiation; and (b) spherical microparticles of porous silica.

(emphasis added.)

The Official Action asserts that each §103(a) rejection is maintained for the reasons set forth in the Official Action mailed November 30, 2005, and/or May 12, 2006. Applicant respectfully disagrees with the bases presented in these prior Official Actions.

Iijima relates to (1) a composition contained in a releasing container such as an aerosol container or pump-type releasing container, and used as being released from such releasing container, and (2) a releasing container product containing such composition. (See Iijima at column 1, lines 5-11.)

Fankhauser relates to the use of mixtures of micronized organic UV filters for preventing tanning and for lightening human skin and hair and to their use in cosmetic and pharmaceutical formulations. (See Fankhauser at column 1, paragraph [0001].)

To establish a *prima facie* case of obviousness, the prior art references (or references when combined) must teach or suggest all of the claimed features. See *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). In addition, "all words in a claim must be considered in judging the patentability of that claim against the

prior art." See *In re Wilson*, 424 F.2d 1382, 1385; 165 U.S.P.Q. 494, 496 (CCPA 1970). See MPEP §2143.03.

Neither Iijima nor Fankhauser, alone or in combination, disclose or fairly suggest a device or composition comprising an emulsion and a photoprotective system capable of screening out UV radiation, as recited in independent claims 1 and 30. In addition, neither reference, alone or in combination, discloses or fairly suggests a device comprising such an emulsion and photoprotective system and further comprising a means to place the composition comprising the emulsion and photoprotective system under pressure, as further recited in claim 1.

In particular, Applicant submits that Iijima is directed to concentrated internal liquid compositions in a releasing container. The disclosed composition is generally in the form of an aqueous lotion with dispersed particles of porous silica therein carrying an active compound. The particles are used in association with a synthetic resin and/or acrylic acid polymer in the presence of an alkaline agent. The active compound may be a perfume, a insect repellent, a deodorant, a plant extract, etc. Nowhere, however, does Iijima disclose or fairly suggest an emulsion comprising a photoprotective system capable of screening out UV radiation and spherical microparticles of porous silica.

Furthermore, the Examples (Examples 1-9) of Iijima appear to be specifically directed to hydroalcoholic lotions containing porous silica carrying active ingredients, which do not constitute UV screening agents, but are instead insect repellents such as, for example, DEET, or antiperspirants such as, for example, aluminum hydroxide chloride.

Furthermore, Iijima does not disclose or fairly suggest using porous silica particles in a composition in the form of an emulsion comprising (a) a photoprotective system capable of screening out UV radiation and (b) spherical microparticles of porous silica, wherein the composition is conditioned in a pressurized device.

In addition, while Iijima may disclose compositions further containing surfactants, the surfactants are disclosed to be useful only for enhancing the dispersion performance of the porous fine particles, not for forming emulsions. (See Iijima, for example, at column 12, lines 60-64 and column 13, first paragraph.)

Fankhauser does not overcome these deficiencies.

Thus, the asserted combination of references does not establish a *prima facie* case of obviousness because it does not teach or fairly suggest all of the claimed features and fails to reflect the proper consideration of "all words" in the claims. Specifically, the asserted combination fails to reflect the proper consideration of "a simpler or complex emulsion," "a photoprotective system capable of screening UV radiation," and "means to place said composition under pressure."

Additionally, Applicant again submits that the Official Action does not establish a *prima facie* case of obviousness under §103 because the Official Action does not provide sufficient reasons to demonstrate *why* one of ordinary skill in the art would have been led to modify Iijima or to combine Iijima with Fankhauser to arrive at the claimed subject matter. Again, the requisite motivation for doing so must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art, not from Applicant's disclosure. See *Ex parte Nesbit*, 25 U.S.P.Q. 2d, 1817, 1819 (BPAI 1992); *In re Oetiker*, 24 U.S.P.Q. 2d 1443, 1446 (Fed. Cir. 1992). The mere fact that the prior art

could be modified does not make such a modification obvious unless the prior art specifically suggests the desirability of that modification. See *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). There must be some intrinsic basis in the prior art or some extrinsic factor that would prompt one of ordinary skill in the art to combine teachings of the references; otherwise, the Patent Office's burden of establishing a *prima facie* case of obviousness has not been met. Moreover, the determination of whether some reason, suggestion, or motivation existed for making the combination must be made from the viewpoint of a hypothetical person of ordinary skill in the field of the invention. See *In re Oetiker*, 24 U.S.P.Q. 2d at 1446; and *In re Raines*, 28 U.S.P.Q. 2d 1630, 1631 (Fed. Cir. 1993). In the present case, no such factors or motivation for combining or modifying Iijima and Fankhauser exist. Iijima fails to disclose or fairly suggest an emulsion containing a UV filtering agent; the Examples of Iijima are specifically directed to hydroalcoholic lotions containing porous silica active ingredients that do not constitute UV screening agents; Iijima fails to specifically disclose using porous silica particles in a composition in the form of an emulsion containing the claimed ingredients; and Iijima only discloses using of surfactants in the composition to enhance dispersion performance of the porous fine particles, not for forming emulsions. Fankhauser does not overcome these deficiencies. Specifically, nowhere does Fankhauser disclose or fairly suggest modifying Iijima to use spherical microparticles of porous silica in a pressurized emulsion composition, as claimed.

In view of these deficiencies in Iijima and the failure of Fankhauser to provide any suggestion that one should, or even could, enhance SPF by modifying Iijima to include the combination of claimed features, Applicant submits that the Official

Action has not demonstrated that one of ordinary skill in the art would have been motivated to combine the references to obtain the claimed combinations of features. Accordingly, Applicant again submits that there is no basis, absent impermissible use of hindsight based on Applicant's disclosure, for combining the references as suggested by the Official Action.

The Official Action also fails to establish that the prior art provides a reasonable expectation of success. M.P.E.P. § 2143.02 states that a reasonable expectation of success is also required to establish a *prima facie* case of obviousness. That is, beyond looking to the prior art to determine if it suggests doing what the inventor has done, one must also consider if the prior art provides the required expectation of succeeding in that endeavor. See *In re Dow Chem. Co. v. American Cyanamid*, 837 F.2d at 873, 5 U.S.P.Q. 2d at 1531 ("both the suggestion and the expectation of success must be founded in the prior art, not in Applicants' disclosure.") In this case, however, the asserted combination of references provides neither a suggestion nor an expectation of success in doing what the inventors have done (i.e., discovering that the claimed combination of features provides unexpectedly enhanced sun protection factor (SPF).) Specifically, one would not have expected to obtain the claimed composition from the cited references, alone or in combination.

Additionally, Applicant again submits that the Federal Circuit has established that evidence arising out of the so-called secondary considerations must always, when present, be considered en route to a determination of obviousness. Indeed, evidence of secondary considerations can be the most probative and cogent evidence in the record. It can establish that an invention appearing to have been

obvious in light of the prior art was not. See *Stratoflex, Inc. v. Aeroquip Corp.*, 218 U.S.P.Q. 871, 879 (Fed. Cir. 1983); and *Joy Technologies v. Quigg*, 14 U.S.P.Q. 2d 1432, 1444 (DDC 1990).

In this case, there is clearly no appreciation in any of the cited references, alone or in combination, of the unexpected and surprising advantages obtained by the claimed device and composition. In particular, the cited references, even in combination, fail to disclose or suggest that one could combine the specific features claimed to arrive at a device and/or composition exhibiting significantly increased sun protection factor (SPF).

As indicated in Applicant's response submitted on August 14, 2006, Applicant provided comparative test data to further support this position. Applicant's comparative tests were carried out with (1) an anti-sun formulation A in the form of a hydroalcoholic lotion according to Iijima capable of being packaged as a non-aerosol spray and capable of being dispensed in the form of fine particles and (2) an anti-sun formulation B in the form of an emulsion according to the present claims capable of being packaged as a non-aerosol spray and capable of being dispensed in the form of fine particles. The results presented in the tables included in Applicant's August 14 response clearly show that the addition of spherical microparticles of porous silica to an emulsion containing a UV filter (benzophenone-3 s) makes it possible to significantly increase sun protection factor (SPF) by more than 100%. The Official Action appears to indicate that the Patent Office has given no weight to Applicant's comparative test data. The Official Action provides no legal authority to support the position that the Patent Office does not need to consider evidence of secondary considerations unless submitted in the form of a §1.132 declaration. Applicant

repeatedly requests that Applicants' comparative test data be given appropriate consideration or that the next Official Action provide legal authority to support the position that a §1.132 declaration is required. In the meantime, in an effort to expedite prosecution of the application, Applicant will consider submitting §1.132 declaration for the Examiner's further consideration.

Accordingly, even if the Official Action had established a *prima facie* showing of obviousness, which Applicant submits it has not, the unexpected results achieved by the claimed combination of features would rebut such a showing.

For at least these reasons, independent claims 1 and 30 are patentable over Iijima in view of Fankhauser. The remaining claims depend, directly or indirectly, from the rejected independent claims and are, therefore, also patentable over Iijima in view of Fankhauser for at least the reasons that independent claims 1 and 30 are patentable.

Torgerson relates to water and alcohol soluble or dispersible thermoplastic elastomeric copolymers and to cosmetic and pharmaceutical compositions containing these copolymers. (See Torgerson at column 1, lines 10-15.) Applicant submits that Torgerson fails to overcome the above-identified deficiencies of Iijima. Again, to establish a *prima facie* case of obviousness, the prior art references (or references combined) must teach or suggest all of the claimed features. Moreover, "all words in a claim must be considered in judging the patentability of that claim against the prior art." (See *In re Royka*, *In re Wilson*, and MPEP §2143.03.) The above-asserted combination of references does not satisfy these requirements and, thus, does not establish a *prima facie* case of obviousness. The asserted combination does not disclose or fairly suggest a device or composition comprising

the recited combination of features including an emulsion and a photoprotective system capable of screening out UV radiation; there is no disclosure or suggestion of using a composition in the form of an emulsion comprising a photoprotective system capable of screening out UV radiation in combination with spherical microparticles of porous silica, as recited in claims 1 and 30, or a device comprising such a composition and means to place the composition under pressure, as further recited in claim 1. Accordingly, Iijima in view of Torgerson fails to disclose or fairly suggest the features of independent claims 1 and 30, and fails to reflect the proper consideration of all words in the independent claims.

The Official Action also fails to establish a *prima facie* case of obviousness because it fails to show why one of ordinary skill in the art would have been led to modify the references to arrive at the claimed combination of features. There is no basis, absent the impermissible use of hindsight based on Applicant's disclosure, for combining the references as suggested in the Official Action. Additionally, the Official Action provides no evidence to suggest that the cited references provide an expectation of success in doing what the inventors have done.

Finally, even if the Official Action had established a *prima facie* showing of obviousness, the unexpectedly enhanced sun protection factor (SPF) resulting from the claimed combination of features rebuts any such showing. (See the comparative test results presented in the tables attached to Applicant's response of August 14, 2006).

For at least these reasons, claims 1 and 30 are patentable over the asserted combination of Iijima in view of Torgerson. Because the remaining claims depend, directly or indirectly, from independent claims 1 or 30, the remaining claims are also

patentable over Iijima in view of Torgerson for at least the reasons that claims 1 and 30 are patentable. Reconsideration and withdrawal of the §103(a) rejection over Iijima in view of Torgerson are respectfully requested.

Candau relates to novel cosmetic and/or dermatological compositions comprising at least one iron oxide nanopigment, well suited for artificially tanning and/or darkening human skin to such extent as to resemble a natural tan. (See Candau at column 1, lines 10-18). Applicant submits that Candau fails to overcome the above deficiencies of Iijima and Torgerson.

In particular, the asserted combination of Iijima, Torgerson and Candau fails to establish a *prima facie* case of obviousness, because the combination does not disclose or fairly suggest all features of the independent claims, which are necessarily present in rejected claims 26-27, 54-55 and 57. The asserted combination fails to disclose or fairly suggest a device or composition comprising an emulsion and a photoprotective system capable of screening out UV radiation, as recited in independent claims 1 and 30. The asserted combination also fails to disclose or fairly suggest a device comprising a means to place such composition under pressure, as further recited in claim 1. Accordingly, the asserted combination fails to disclose or fairly suggest these features of the independent claims and does not reflect a proper consideration of all words in independent claims 1 and 30.

The Official Action also fails to demonstrate that one of ordinary skill in the art would be motivated to combine the references to obtain the claimed combination of features, absent the impermissible use of hindsight based on applicant's own disclosure. The Official Action also fails to demonstrate that the prior art establishes an expectation of success in doing what the inventors have done. Accordingly, the

Official Action fails to establish a *prima facie* case of obviousness for at least these additional reasons.

Additionally, even if the Official Action had established a *prima facie* showing of obviousness, the unexpectedly enhanced sun protection factor (SPF) resulting from the claimed combination of features would rebut any such showing. Again, see the comparative test results presented in the tables attached to Applicant's response of August 14, 2006.

For at least these reasons, claims 26-27, 54-55 and 57 are patentable over the asserted combination of references for at least the reasons that claims 1 and 30 are patentable. Reconsideration and withdrawal of the §103(a) rejection over Iijima, Torgerson and Candau are respectfully requested.

Claims 1, 3, 4, 9-12, 14-17, 30, 32, 33, 38-41 and 43-46 stand provisionally rejected on the grounds of non-statutory obviousness-type double patenting over claims 1, 4, 6-15, 29 and 30 of copending application No. 10/365,653.

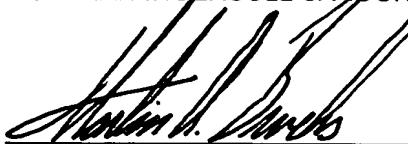
Again, because of the provisional nature of this rejection, Applicant respectfully requests the rejection continue to be held in abeyance until there has been an indication of allowable subject matter. At that time, if the rejection is maintained, Applicant will respond appropriately.

From the foregoing, Applicant earnestly solicit further and favorable action in the form of a Notice of Allowance.

If there are any questions concerning this paper or the application in general, the Applicant invites the Examiner to telephone the undersigned at the Examiner's earliest convenience.

Respectfully submitted,

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